# Table A-1: Allocated Water Capital Improvement Program-O&M Base

O&M%	Growth%	6 Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
100%	0%	Water Emergency Reserve	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$3,000,000
100%	0%	Annual Water Line Replacement-2 Mile	\$2,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$31,000,000
100%	0%	Annual Meter Replacement-15 yr cycle	\$300,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$3,900,000
100%	0%	Meter Replacement-Catch up		\$450,000	\$450,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900,000
100%	0%	AMR Meter Fixed Network		\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000
100%	0%	Water Vault/PRV Replacement Program	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,350,000
100%	0%	Rio Flood Control Project 1	\$0	\$500,000	\$50,000	\$50,000	\$400,000	\$125,000	\$125,000	\$150,000	\$200,000	\$150,000	\$1,750,000
100%	0%	LM WTP - Electrical Svc Upgrades-Replace xfmr	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
100%	0%	Railroad Springs # 1 Tank Rehabilitation		\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000
100%	0%	LM Raw Water Pump Station							\$120,000	\$240,000	\$240,000		\$600,000
50%	50%	LM WTP - Sedimentation Basins		\$400,000	\$800,000	\$800,000							\$2,000,000
50%	50%	LM WTP - Flocculation Basins		\$640,000	\$640,000								\$1,280,000
100%	0%	Lake Mary WTP Land Acquisition from FS		\$1,400,000									\$1,400,000
50%	50%	Switzer Canyon/RFP Transmission WL		\$150,000	\$1,000,000	\$150,000	\$1,050,000	\$150,000	\$1,050,000				\$3,550,000
70%	30%	Rate Study-every 3 years				\$150,000			\$150,000			\$150,000	\$450,000
100%	0%	Fox Glenn Well Energy Efficiency Upgrade				\$137,500							\$137,500
100%	0%	WM Clarifier				\$134,000	\$268,000	\$268,000					\$670,000
50%	50%	Water System Master Plan-Every 5 yrs				\$150,000					\$150,000		\$300,000
30%	70%	Pine Del Waterline upsizing								\$100,000	\$950,000		\$1,050,000
100%	0%	Lake Mary Watershed FWPP Maintenance										\$100,000	\$100,000
Subtotal	Water Proje	ects to be included in Rate and Fee Study	\$3,100,000	\$7,940,000	\$7,290,000	\$5,621,500	\$5,768,000	\$4,593,000	\$5,495,000	\$4,540,000	\$5,590,000	\$4,450,000 \$	54,387,500

<sup>1.</sup> Rio de Flag Flood Control Project is allocated to the Water and Sewer Systems (50% Water and 50% Sewer).

Source: City of Flagstaff

<sup>2.</sup> Red Gap Ranch water resources based on 12,000 acre feet per year

Table A-2: Water Capital Improvement Program Allocated to New Growth-Capacity Fee Base

O&M%	Growth 9	% Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
0%	100%	Hydrologic Study for new wells	\$250,000										\$250,000
0%	100%	New Well and Pumphouse		\$3,000,000		\$3,000,000		\$3,000,000		\$3,000,000		\$3,000,000	\$15,000,000
50%	50%	LM WTP - Sedimentation Basins		\$200,000	\$400,000	\$400,000							\$1,000,000
50%	50%	LM WTP - Flocculation Basins		\$320,000	\$320,000								\$640,000
50%	50%	Switzer Canyon/RFP Transmission WL		\$75,000	\$500,000	\$75,000	\$525,000	\$75,000	\$525,000				\$1,775,000
70%	30%	Rate Study-every 3 years			\$45,000			\$45,000				\$150,000	\$240,000
50%	50%	Water System Master Plan-Every 5 yrs				\$75,000					\$75,000		\$150,000
0%	100%	Fort Tuthill Waterline Loop -Phase 2					\$525,600	\$1,051,200	\$1,051,200				\$2,628,000
0%	100%	JW Powell Waterline Oversizing						\$2,085,000					\$2,085,000
30%	70%	Pine Del Waterline upsizing								\$70,000	\$665,000		\$735,000
0%	100%	Cheshire Tank Expansion-Upgrade Zone A								\$700,000			\$700,000
0%	100%	Railroad Springs #3 Storage tank 1 MG									\$300,000	\$1,200,000	\$1,500,000
0%	100%	Red Gap Ranch Well Completion, pump testing, sizing			\$750,000	\$1,500,000	\$1,500,000						\$3,750,000
0%	100%	Red Gap Ranch NEPA Environmental Impact Study				\$416,667	\$833,333	\$833,333	\$416,667				\$2,500,000
0%	100%	Red Gap Ranch Water Quality Study			\$200,000	\$200,000							\$400,000
0%	100%	Red Gap Ranch ROW Acquisition Segments 1-3					\$880,000	\$880,000	\$440,000				\$2,200,000
0%	100%	Red Gap Ranch ROW Survey and Mapping					\$150,000						\$150,000
0%	100%	Red Gap Ranch Geotechnical Investigation							\$450,000	\$50,000			\$500,000
0%	100%	Red Gap Ranch Well Field Piping Design								\$250,000	\$250,000		\$500,000
0%	100%	Red Gap Ranch Pump Station Design								\$270,000	\$540,000	\$540,000	\$1,350,000
0%	100%	Red Gap Ranch Water Treatment Plant Design								\$366,667	\$366,667	\$366,667	\$1,100,000 \$0
Subtotal	Water Proje	ects to be included in Capacity Fees	\$250,000	\$3,595,000	\$2,215,000	\$5,666,667	\$4,413,933	\$7,969,533	\$2,882,867	\$4,706,667	\$2,196,667	\$5,256,667	\$39,153,000

<sup>1.</sup> Red Gap Ranch water resources based on 12,000 acre feet per year

# Table A-3: Water Capital Improvement Program Allocated to New Growth-Capacity Fee Option 1 Red Gap Pump station Design added

O&M% Growth % Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
0% 100% Red Gap Ranch Pipeline/Pump Station Design							\$1,045,000	\$3,135,000	\$3,135,000	\$3,135,000	\$10,450,000 \$0
Subtotal Water Projects to be included in Capacity Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045,000	\$3,135,000	\$3,135,000	\$3,135,000	\$10,450,000

<sup>1.</sup> Red Gap Ranch water resources based on 12,000 acre feet per year

# **Back to Index**

	Growth															
O&M%	%	ID # Project	F	Y2016	FY2017	FY2018	FY20	19	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	Tota
100%	0%	Annual Sewer Replacement Program (One Mile per year)	\$	1,300,000 \$	1,400,000 \$	1,400,000	\$ 1,4	00,000 \$	1,400,000	\$ 1,400,000 \$	1,400,000	\$ 1,400,00	0 \$	1,400,000	\$ 1,400,000 \$	13,900,000
60%	40%	Flagstaff Interceptor Improvements -25%	\$	-	\$	600,000	\$ 6	00,000 \$	600,000	\$ - \$	-	\$	- \$	-	\$ - \$	1,800,000
100%	0%	Rio Flood Control Project-Sewer Relocations	\$	- \$	- \$	-	\$	- \$	300,000	\$ 300,000 \$	300,000	300,00	0 \$	300,000	\$ 300,000 \$	1,800,000
20%	80%	East Industrial (near North Park Drive)	\$	- \$	- \$	-		\$	-	\$ - \$	290,000	\$	- \$	-	\$ - \$	290,000
20%	80%	Sunnyside Trunk Upsizing	\$	- \$	- \$	-		\$	-	\$ - \$	65,000	\$	- \$	-	\$ - \$	65,000
20%	80%	South Milton Road (at West University Avenue)	\$	- \$	- \$	-	\$	-		\$ \$	170,000	\$	- \$	-	\$ - \$	170,000
20%	80%	Ponderosa Parkway - McMillan Mesa	\$	- \$	- \$	-	\$	- \$	-	\$ - \$	- 5	\$	- \$	-	\$ 62,000 \$	62,000
20%	80%	East Railhead (near North Dodge Avenue)	\$	- \$	- \$	-	\$	- \$	-	\$ - \$	- 5	8	- \$	-	\$ 79,000 \$	79,000
100%	0%	Rio WRP-UV System Replacement	\$	700,000 \$	700,000 \$	-	\$	- \$	-	\$ - \$	- 5	\$	- \$	-	\$ - \$	1,400,000
100%	0%	WWTP Blower Replacements-Energy Efficiency	\$	600,000 \$	650,000 \$	350,000	\$	- \$	-	\$ - \$	- 9	3	- \$	-	\$ - \$	1,600,000
20%	80%	Wildcat Septage and Grease Station Wildcat WWTP- <u>Carbon storage and feed</u>	\$	40,000 \$	- \$	-	\$	- \$	-	\$ - \$	- (	5	- \$	-	\$ - \$	40,000
100%	0%	system, Micro C addition	\$	200,000 \$	- \$		\$	- \$		\$ - \$	- \$		- \$		\$ - \$	200,000
70%	30%	Wildcat WWTP-Develop Solids Handling Plan Wildcat WWTP-Repair Digester #2, Cover, and	\$	- \$	- \$ 300,000		\$ \$	- \$ - \$	-	\$ - \$ - \$	- ( - (		- \$ - \$		\$ - \$	300,000
		piping and coating repairs per inspection, view			\$	200,000										
100%	0%	port	\$	- \$	-		\$	- \$	-	\$ - \$	- 5	5	- \$	-	\$ - \$	200,000
70%	30%	Wildcat WWTP-Permanent Solids Disposal Equipment	\$	- \$	\$	886,000	\$ 1,7	72,000 \$	1,772,000	\$	- (	3	- \$	-	\$ - \$	4,430,000
30%	70%	Wildcat WWTP- Third Digester and Replace Heat Recovery System Wildcat WWTP-VFD and Pump Replacements	\$	- \$	- \$	-	\$	- \$	662,000	\$ 1,324,000 \$	1,324,000				\$ - \$	3,310,000
		for Primary Effluent, Secondary Effluent, and						\$	300,000							
100%	0%	FCC Pump Stations	\$	- \$	- \$	-	\$	- '		\$ - \$	- 9	3	- \$	-	\$ - \$	300,000
50%	50%	Sewer System Master Plan	\$	- \$	- \$	-	\$ 15	50,000 \$	-	\$ - \$	- 5	3	- \$	150,000	\$ - \$	300,000
100%	0%	Sewer Emergency Reserve	\$	300,000 \$	300,000 \$	300,000	\$ 30	00,000 \$	300,000	\$ 300,000 \$	300,000	300,00	0 \$	300,000	\$ 300,000 \$	3,000,000

Source: City of Flagstaff

<sup>1.</sup> Rio de Flag Flood Control Project is allocated to the Water and Sewer Systems (50% Water and 50% Sewer). G=Growth O & M=Operations & Maintenance

#### Table A-5: Wastewater Capital Improvement Program Allocated to New Growth-Base Capacity Fees Growth **0&M%** % ID # Project FY2016 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023 FY2024 FY2025 Total Flagstaff Interceptor (CCC to Wildcat Hills 60% 40% 400,000 \$ 400,000 \$ 400,000 \$ 1,200,000 West-side Interceptor Improvements 0% 100% Replace 8" Bottleneck on Thompson \$500,000 \$ 500,000 20% 80% East Industrial (near North Park Drive) \$232,000 \$ 232,000 20% 80% \$52,000 \$ 52,000 Sunnyside South Milton Road (at West University Avenue) \$136,000 20% 80% 136,000 Westside Route 66 - (Developer - Aspen \$730,000 \$730,000 0% 100% Heights) 1,460,000 20% 80% Ponderosa Parkway - McMillan Mesa \$49,600 49,600 80% East Railhead (near North Dodge Avenue) 63,200 20% \$63,200 \$ 0% 100% Westside-WL Gore Sewerline Oversizing \$553,691 \$553,691 1,107,382 Fort Tuthill Sewerline Oversizing \$760,000 \$ 760,000 0% 100% 20% 80% Wildcat Septage and Grease Station - \$ - \$ \$ 160,000 \$ 160,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ 70% 30% Wildcat WWTP-Develop Solids Handling Plan \$90,000 90,000 Wildcat WWTP-Permanent Solids Disposal 70% 30% \$531,600 \$531,600 \$265,800 \$ 1.329.000 Equipment Wildcat WWTP- Third Digester 30% 70% \$463,400 \$926,800 \$926,800 \$ 2,317,000 \$ Sewer System Master Plan \$75,000 \$75,000 150,000 50% 50% Sewer Projects to be included in Capacity Fees 160,000 \$ 90,000 \$ 931,600 \$ 1,686,800 \$ 1,346,800 \$ 1,053,691 \$ 1,358,691 \$ 1,006,600 \$ 1,129,200 \$ 842,800 \$ 9,606,182

G=Growth Related Costs only

Source: City of Flagstaff

# **Back to Index**

Table A-	6: Allocate	ed Reclaimed Water Capital Improvement Program											
O&M%	Growth%	ID # Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
50% 50% 50%	50% 50% 50%	Reclaim System Improvement-8" Bottleneck \$ Juniper Point 1400 ft. of 12" diameter RW pipeline \$ Juniper Point Loop 2nd Connection 2000 ft. 12" diameter RW pipelin \$	- : - : - :	5 - \$ 5 - \$ 5 - \$	700,000 \$ 210,000 \$ - \$	700,000 - \$	\$ - \$ - \$ \$ - \$	- ( 310,000	\$ - \$ \$	\$ - \$ - \$	- \$ - \$ - \$	- \$ - \$ - \$	1,400,000 210,000 310,000
100% 80% 100%	0% 20% 0%	Reclaim Master Plan <sup>1</sup> Reclaim Storage \$ Reclaim Water line Loop-Continential Phase 1 \$	- ! - !	\$ - \$ - \$	- \$ - \$ - \$	50,000 - \$ - \$	\$ \$ - \$ -	- :	\$ - \$ \$ - \$ \$ - \$	50,000 \$ - \$ - \$	- \$ 2,000,000 - \$	- \$ \$ 1,500,000 \$	100,000 2,000,000 1,500,000
		Subtotal Reclaimed Projects to be included in Rate and Fee Study \$	- :	- \$	910,000 \$	750,000	\$ - \$	310,000	s - s	50,000 \$	2,000,000 \$	1,500,000 \$	5,520,000

#### **Back to Index**

Table A	A-7: Alloc	ated Stormwater Capital Improvement Pro	gram-Option 2										
O&M%	Growth%	% Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
100%	0%	Schultz Creek	500,000	-	-		=	=	-	=	=	- \$	500,000
100%	0%	Fanning Drive Wash - Lockett Road	100000	500,000		-	-	-	-	-	-	- \$	600,000
100%	0%	Cottage and Elden		100,000	300000							\$	400,000
100%	0%	Fanning Drive Wash - Steve's Blvd Crossing			150,000							\$	150,000
100%	0%	Spruce Avenue Wash - Linda Vista			150000	300,000						\$	450,000
100%	0%	Bow and Arrow Wash				300000	600,000	600,000				\$	1,500,000
100%	0%	<sup>2</sup> Steve's Boulevard Wash - Soliere Crossing							500,000			\$	500,000
100%	0%	West Phoenix		-					100,000	130,000		\$	230,000
100%	0%	<sup>2</sup> Spruce Avenue Wash Dorth Inlet	-							270,000		\$	270,000
100%	0%	<sup>2</sup> Hospital Hill								200,000	330,000	\$	530,000
100%	0%	McMillan Mesa	-	-							100,000	\$	100,000
100%	0%	<sup>2</sup> Shadow Mountain Phase II	-	-							170,000	130,000 \$	300,000
100%	0%	<sup>2</sup> Smokerise	_	_	_	-						470,000 \$	470,000
100%	0%	Dry Lake Watershed FWPP Maintenance										100,000 \$	100,000
Subtotal	Stormwate	er Projects to be included in Rate and Fee Study	\$ 600,000 \$	600,000 \$	600,000 \$	600,000 \$	600,000 \$	600,000 \$	600,000 \$	600,000 \$	600,000 \$	700,000 \$	6,100,000

<sup>&</sup>lt;sup>1</sup> Projects with OCI < 50 have been removed- Not included in Street Repair Initiative

<sup>&</sup>lt;sup>2</sup> These projects are part of OCI >50<70 - Not included in Street Repair Initiative

Table A	-8: Alloca	ated Stormwater Capital Improvement Pro	gram-Option 3	-\$1M per year									
O&M%	Growth%	Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
100%	0%	Schultz Creek	500,000	-	=		-	=	-	-	=	- \$	500,000
100%	0%	Fanning Drive Wash - Lockett Road	500,000			-	-	-	-	-	-	- \$	500,000
100%	0%	Cottage and Elden		400,000								\$	400,000
100%	0%	Fanning Drive Wash - Steve's Blvd Crossing		150,000								\$	150,000
100%	0%	Spruce Avenue Wash - Linda Vista		450,000								\$	450,000
100%	0%	Bow and Arrow Wash			1000000	500,000						\$	1,500,000
100%	0%	<sup>2</sup> Steve's Boulevard Wash - Soliere Crossing				500,000	-	-				\$	500,000
100%	0%	West Phoenix		-			230,000	-				\$	230,000
100%	0%	<sup>2</sup> Spruce Avenue Wash Dorth Inlet	-				270,000	-				\$	270,000
100%	0%	<sup>2</sup> Hospital Hill	-				500,000	-				\$	500,000
100%	0%	<sup>2</sup> Shadow Mountain Phase II	-	-				800,000				\$	800,000
100%	0%	McMillan Mesa	-	-	-			100,000				\$	100,000
100%	0%	<sup>2</sup> Darleen Drive Drainage Improvements						100,000				\$	100,000
100%	0%	Mobile Haven							300,000			\$	300,000
100%	0%	U Heights and S Litzler Storm drains							30,000			\$	30,000
100%	0%	Penstock Wash Crossings							570,000			\$	570,000
100%	0%	N Sunset Drainage Improvements							100,000			\$	100,000
100%	0%	Penstock Avenue Wash								1,000,000	1,000,000	\$	2,000,000
100%	0%	Switzer Canyon Wash Lower Reach										900,000 \$	900,000
100%	0%	Dry Lake Watershed FWPP Maintenance										100,000 \$	100,000
Subtotal	Stormwate	r Projects to be included in Rate and Fee Study	\$ 1,000,000	\$ 1,000,000 \$	1,000,000 \$	1,000,000 \$	1,000,000 \$	1,000,000 \$	1,000,000 \$	1,000,000	\$ 1,000,000 \$	1,000,000 \$	10,000,000

 $<sup>^1\</sup>text{Projects}$  with OCI < 50 have been removed- Not included in Street Repair Initiative  $^2\text{These}$  projects are part of OCI >50<70

Table A-9: Allocated Stormwater Capital Improvement Program-Option 4 - Rio de Flag plus \$400K Base												
O&M% Growth	% Project	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
100% 0%	Drip Projects	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	4,000,000
100% 0%	Rio De Flag Control Project	-	-	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000				15,000,000
Subtotal Stormwa	400.000 \$	400.000 \$	3.400.000 \$	3.400.000 \$	3.400.000 \$	3.400.000 \$	3.400.000 \$	400.000 \$	400.000 \$	400.000 \$	19.000.000	